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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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30593	7590	09/07/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			GUPTA, PARUL H	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2627	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/753,401	KIM ET AL.	
	Examiner	Art Unit	
	Parul Gupta	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-39 are pending for examination as interpreted by the examiner. No IDS was considered.

Claim Objections

2. Claim 4 is objected to because of the following informalities: minor typographical errors such as the use of "a area" instead of "an area". Appropriate correction is required.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3, 5-6, 8-12, 15-17, 19-20, 23-25, 27-28, 31-33, 35-36, and 39 are rejected under 35 U.S.C. 102(a) as being anticipated by Kuroda et al., US Patent 6,735,155.

Regarding claim 1, Kuroda et al. discloses in figure 7 recording medium, comprising: a data area including at least two data sections ("new data" and "old data" areas); and a linking area to link neighboring data sections, the linking area including dummy data (shown in element 44 and "dummy information" as described in abstract).

Regarding claim 2, Kuroda et al. discloses from column 1, line 51 to column 2, line 4 the recording medium of claim 1, wherein the dummy data improves reproduction compatibility between the recording medium (medium containing "old data") and at least one other recording media type (medium containing "new data").

Regarding claim 3, Kuroda et al. discloses the recording medium of claim 2, wherein the at least one other recording media type is a write-once or rewritable type (column 1, lines 13-19).

Regarding claim 5, Kuroda et al. discloses in figure 7 the recording medium of claim 1, wherein the linking area includes at least two linking frames (42 and 42).

Regarding claim 10, Kuroda et al. discloses the recording medium of claim 5, wherein each of the at least two linking frames includes different patterns of dummy data (column 12, lines 8-34).

Regarding claim 11, Kuroda et al. discloses the recording medium of claim 10, wherein subsequent and/or preceding linking areas include the same pattern of dummy data (column 12, lines 8-34). Figure 7 shows how the linking areas (40) are repeated.

Regarding claim 12, Kuroda et al. discloses the recording medium of claim 10, wherein subsequent and/or preceding linking areas include different patterns of dummy data (column 12, lines 8-34).

Regarding claim 6, Kuroda et al. discloses in figure 5 the recording medium of claim 5, wherein each of the at least two linking frames includes the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 8, Kuroda et al. discloses the recording medium of claim 6, wherein subsequent and/or preceding linking areas include the same pattern of dummy

data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 9, Kuroda et al. discloses the recording medium of claim 6, wherein subsequent and/or preceding linking areas include different patterns of dummy data (column 12, lines 8-34).

Regarding claim 15, Kuroda et al. discloses a method of forming a recording medium, comprising: forming a linking area to link neighboring data sections of a data area while recording data onto the recording medium; writing dummy data in the linking area to link the neighboring data sections (column 2, lines 33-44).

Regarding claim 16, Kuroda et al. discloses the method of claim 15, wherein the linking area includes at least two linking frames ("sync frames" of column 10, line 28).

Regarding claim 17, Kuroda et al. discloses the method of claim 16, wherein each of the at least two linking frames includes the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 19, Kuroda et al. discloses the method of claim 16, wherein each of the at least two linking frames includes different patterns of dummy data (column 8, lines 58-65). The given section explains the discrepancy between the old dummy area and the new dummy area, suggesting that the old and new frames contain a different pattern.

Regarding claim 20, Kuroda et al. discloses the method of claim 19, wherein subsequent and/or preceding linking areas include the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 23, Kuroda et al. discloses a method of reproducing data from a recording medium, comprising: utilizing a linking area, including dummy data, which links neighboring data sections of a data area, to reproduce the data (column 2, lines 33-44).

Regarding claim 24, Kuroda et al. discloses the method of claim 23, wherein the linking area includes at least two linking frames ("sync frames" of column 10, line 28).

Regarding claim 25, Kuroda et al. discloses the method of claim 24, wherein each of the at least two linking frames includes the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 27, Kuroda et al. discloses the method of claim 24, wherein each of the at least two linking frames includes different patterns of dummy data (column 8, lines 58-65). The given section explains the discrepancy between the old dummy area and the new dummy area, suggesting that the old and new frames contain a different pattern.

Regarding claim 28, Kuroda et al. discloses the method of claim 27, wherein subsequent and/or preceding linking areas include the same pattern of dummy data

(column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 31, Kuroda et al. discloses a method of recording data on a recording medium, comprising: utilizing a linking area, including dummy data, which links neighboring data sections of a data area, to record the data (column 2, lines 33-44).

Regarding claim 32, Kuroda et al. discloses the method of claim 31, wherein the linking area includes at least two linking frames (column 12, lines 8-15).

Regarding claim 33, Kuroda et al. discloses the method of claim 32, wherein each of the at least two linking frames includes the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 35, Kuroda et al. discloses the method of claim 33, wherein each of the at least two linking frames includes different patterns of dummy data (column 12, lines 8-34).

Regarding claim 36, Kuroda et al. discloses the method of claim 35, wherein subsequent and/or preceding linking areas include the same pattern of dummy data (column 8, lines 45-65, especially lines 53-55 explain that both old and new dummy data are written in sequence and contain the same content).

Regarding claim 39, Kuroda et al. discloses an apparatus for reproducing data from a recording medium, said apparatus utilizing a linking area, including dummy data, which links neighboring data sections of a data area, to reproduce the data (column 2, lines 33-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 7, 13, 18, 21, 26, 29, 34, and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. in view of Ueda et al. US Patent Publication 2001/0026511.

Kuroda et al. teaches all of the limitations of claims 1, 6, 10, 17, 19, 25, 27, 33, and 35 but fails to teach the further limitations of claims 4, 7, 13, 14, 18, 21, 22, 26, 29, 30, 34, 37, and 38.

Regarding claim 4, Ueda et al. teaches in paragraph 0117 the recording medium of claim 1, wherein the dummy data is located in a area of the linking area ("data buffer") reserved for user data. This is evidenced by the fact that the dummy data is used to replace the data stored in the buffer.

Regarding claim 7, Ueda et al. teaches the recording medium of claim 6, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 13, Ueda et al. teaches the recording medium of claim 10, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 14, Ueda et al. teaches the recording medium of claim 10, wherein each of two linking frames includes patterns of "08h" followed by "00h". Paragraph 0117 explains that the dummy data is 00h. The value of "08h" can be altered as an obvious matter of design choice as long as the value of "00h" is used last to yield the same result.

Regarding claim 18, Ueda et al. teaches the method of claim 17, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 21, Ueda et al. teaches the method of claim 19, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 22, Ueda et al. teaches the method of claim 19, wherein each of two linking frames includes patterns of "08h" followed by "00h". Paragraph 0117 explains that the dummy data is 00h. The value of "08h" can be altered as an obvious change of design choice as long the value of "00h" is used last to yield the same result.

Regarding claim 26, Ueda et al. teaches the method of claim 25, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 29, Ueda et al. teaches the method of claim 27, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 30, Ueda et al. teaches the method of claim 27, wherein each of two linking frames includes patterns of "08h" followed by "00h". Paragraph 0117 explains that the dummy data is 00h. The value of "08h" can be altered as an obvious matter of design choice as long as the value of "00h" is used last to yield the same result.

Regarding claim 34, Ueda et al. teaches the method of claim 33, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 37, Ueda et al. teaches the method of claim 35, wherein the pattern of dummy data is at least one of "00h", "01h", "10h", "08h", "AAh", or "FFh". Paragraph 0117 explains that the dummy data is 00h.

Regarding claim 38, Ueda et al. teaches the method of claim 35, wherein each of two linking frames includes patterns of "08h" followed by "00h". Paragraph 0117 explains that the dummy data is 00h. The value of "08h" can be altered as an obvious matter of design choice as long as the value of "00h" is used last to yield the same result.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the given values of dummy data recorded in the given area as taught by Ueda et al. into the system of Kuroda et al. The motivation would be to ease in the recovery process in the event of an error (paragraph 0123 of Ueda et al.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 8:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG
9/5/06


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